The School of Engineering's Technical Communication Program (TCP), located in **Huang 049**, is a writing and public speaking resource for Stanford students of all levels. The TCP offers individual consulting and coaching in addition to a range of courses to help students in the STEM fields become more effective writers and presenters.

---

engineering.stanford.edu/tcp

CS181W, Winter 2018: Working with the Technical Communication Program (TCP)
What do you need to do to fulfill your WIM requirement?

● All students enrolled in CS181**W (WIM)** are required to revise one memo.

⬇

● All WIM students **are required to meet 1x** with a writing instructor from the TCP (at Huang 049), who will give you feedback on how to effectively revise the memo.

⬇

● A **dedicated sign-up site** offers 30-minute, one-on-one conferences. Please go to this link to sign up for **ONE** conference. **Conferences are offered from February 12 to March 11.**

http://www.signupgenius.com/go/5080F49A9AF2FA5FF2-cs181w

⬇

● Read the **following handout** to get helpful tips on writing effective documents!

Questions? Email Mary McDevitt, Director, TCP:
mary.mcdevitt@stanford.edu

<u>**Guidelines for Effective Professional Writing**</u>

 What do readers in a professional setting look for in documents (e.g., memos, emails, reports)?
- Concise, clear, tonally appropriate prose
- Key information located **in prominent positions**
- Visually accessible information

 **How** do readers in a professional setting read documents?
- **Quickly!**
- Possibly inattentively or with distractions

Try to organize and format your documents to make them as appropriate to this type of reader as possible.

- **Reveal structure visually**: use content-specific, descriptive headings (and subheadings for longer documents); include other formatting devices (bullet points, boldfacing, and numbered lists) *when appropriate*; leave enough white space around sections. Headings serve as a roadmap to the document, identifying key concepts and topics and aiding the flow of information. Informative headings and white space make the contents of your document more visually accessible and attractive, allowing readers to locate and identify information easily. *Judicious* use of bullets and lists (make sure lists have textual context!) also help readers navigate the text more easily.

- Make sure that your **tone is appropriate** and **your word choice understandable to your audience**, purpose, and occasion. Keep subjects close to verbs; use descriptive, precise verbs. Eliminate unnecessary wordiness (e.g., "blue in color," or "due to the fact that" instead of "because").

- Practice effective framing or set up of paragraphs: include **topic sentences** that summarize main point or preview the topic/contents of a paragraph. Use the "inverted pyramid" or BLUF (bottom line up front) approach—*start from the main point* and then provide supporting or amplifying details. Do not bury key information in the middle of paragraphs or sections!
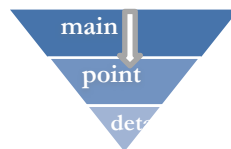
- Help your readers follow your text effortlessly. Be consistent in use of key words and phrases. Include logical transitions. Make thoughtful use of transitional words and phrases (e.g., *therefore*, *in contrast*, *however*, *moreover*, *likewise*, *not only . . . , but also*). Use enumeration when appropriate ("the two most significant limitations are x and y."), and use enumerative words that indicate process or chronology (e.g., "First," "second," "next," "then").

- **Eliminate ambiguous or vague pronoun references** such as a "this" or "it" that have no clear referent.

- Number and provide a caption for all figures and tables. Cite figures in text. Figures and text need to work together.

- **Proofread carefully**. Typographical errors and mistakes in grammar and mechanics (spelling and punctuation) make your writing awkward and unclear—and make a bad
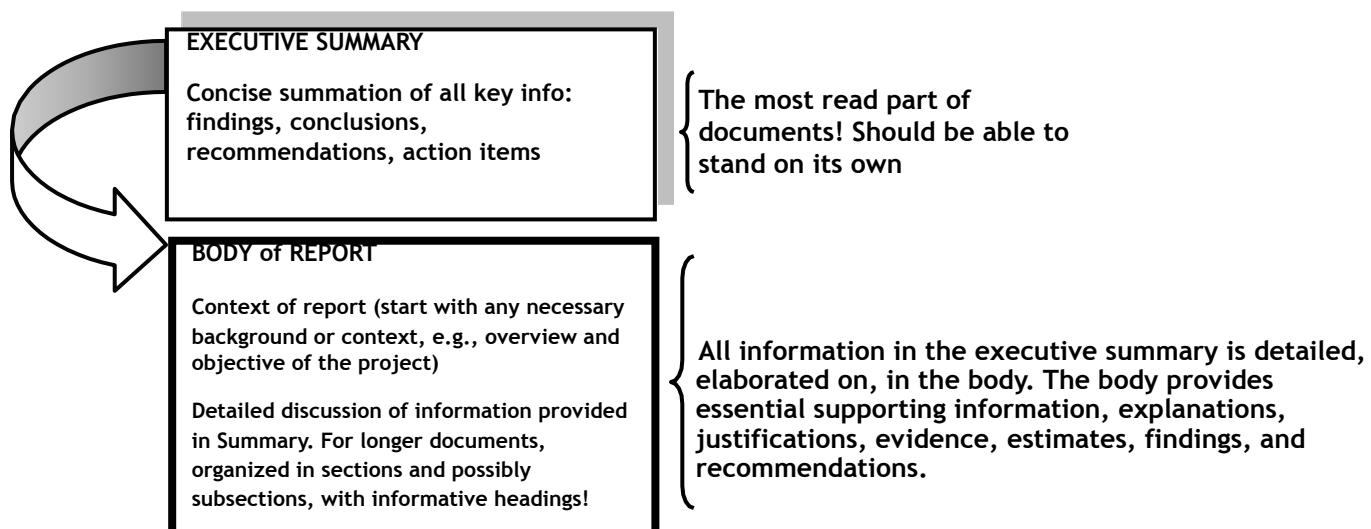
impression. Reading your report aloud to yourself is a good way to proofread more effectively.

The Executive Summary

<u>Summary of Executive Summary</u>: An Executive Summary is a highly condensed version ("in a nutshell") of the *attached full document*. It contains enough information for the readers to become informed about the main points and recommendations of the longer document *without reading the entire document*.

An **executive summary,** sometimes simply referred to as a "summary," is placed at the beginning of a document and is aimed at helping readers easily access the main "takeaways" of a longer report and to make decisions. Because it is a concise summation of a report's contents, the executive summary allows readers at the executive/managerial/decision-making level to quickly grasp the most important information contained in the longer report. A summary can contain a brief overview of the problem or topic covered in the main document and a concise summation of any necessary contextual information. **It must include <u>main findings, conclusions and/or recommendations/action items</u>.** The summary should only include information present and detailed in the main, longer document. Note that

● **a summary is NOT an introduction to the longer document**

● **a summary is NOT a table of contents; it contains a summation of key ideas, results, conclusions, recommendations/action items**

● **a summary *can* include formatting (e.g., bullet points)**

● **if the material in the longer document is highly technical, and readers with non-technical background are among the audience, then an executive summary *should use language that the non- technical reader will find useful***

● **readers expect all information and points brought up in executive summary to be addressed and expanded upon in longer document. The summary and the longer document/report should correspond to each other, even as they are self sufficient, i.e., each able to stand apart from the other.**

EXECUTIVE SUMMARY

Concise summation of all key info: findings, conclusions, recommendations, action items

The most read part of documents! Should be able to stand on its own

BODY of REPORT

Context of report (start with any necessary background or context, e.g., overview and objective of the project)

Detailed discussion of information provided in Summary. For longer documents, organized in sections and possibly subsections, with informative headings!

All information in the executive summary is detailed, elaborated on, in the body. The body provides essential supporting information, explanations, justifications, evidence, estimates, findings, and recommendations.

Importance of Topic Sentences in Technical Writing

Effective topic sentences **are particularly necessary in STEM and professional writing because they "frame," or set up, the material for readers** and allow the readers to move through a paragraph more easily, with greater understanding and comprehension of the details. Good topic sentences act as signals or "road signs" for readers, telling them where the writer is taking them. Topic sentences can set up a paragraph **in different ways**. Topic sentences can

- **make an assertion, claim**, **or recommendation** that will be detailed and supported by evidence in the paragraph.

> "The designers were not responsible for the failure."

> "The government deliberately left an important group of stakeholders, the local farmers, out of the entire decision-making process."

> "Choosing X would be too risky for the decision maker."

> "We should ensure that additional safeguards are put in place."

- **interpret up front data or facts that are** detailed & explained in the paragraph.

> "The analysis shows that the decision-maker's dominating alternative is to choose to collaborate with the Finnish gas provider."

> "The data show that the failure resulted from X."

> "The total costs of all major phases of the project were lower than estimated."

> "The experimental results demonstrate that A is more effective at reducing the amount of toxins than B." "X is 15% faster than Y under the same conditions."

- **establish a specific scenario, context or state** that the paragraph will describe.

> "The opponents to the X project had different motivations for their opposition, but all agreed that the project would have negative consequences."

> "Some of the literature focuses on simulations of X."

> "The documentation was done sporadically and was incomplete."

> "This study extended our noncontact DCS system into ncDCT for 3-D flow imaging of deep tissue."

> "Because of its adaptability, the technology has great potential for applications ranging from small digital devices to satellites."

- **set up enumeration of parallel items** that the paragraph will discuss.

> "The decision maker faces two significant challenges, X and Y."

> "The project has 4 major milestones: a, b, c, and d."

"The decision involves 3 significant risks: A, B and C.